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**IN THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1           1.       (original) A communication system for transporting Internet protocol-formatted  
2 communications over a Universal Mobile Telecommunications System (UMTS) wireless  
3 communications system, the communication system including a base station and a radio network  
4 controller, the communication system further comprising:

5           an inter-working gateway adapted for interconnection to the radio network controller and  
6 the base station, the inter-working gateway being adapted to communicate via Internet transport  
7 protocols and UMTS-based transport protocols, the inter-working gateway being further adapted  
8 to reformat communications with movable UMTS-based radio-controlled network layer  
9 protocols for transport to the radio network controller and to reformat communications with  
10 movable Internet radio-controlled network layer protocols for transport to the base station.

1           2.       (original) The communications system as recited in claim 1, wherein the UMTS  
2 communications system exists at an installed site.

1           3.       (original) The communications system as recited in claim 1, wherein the inter-  
2 working gateway is supplied as pre-installed with the transport protocols.

1           4.       (original) The communications system as recited in claim 1, wherein the inter-  
2 working gateway is adapted to receive and download the radio-controlled network layer  
3 protocols and the transport protocols from the base station.

1           5.       (original) The communications system as recited in claim 1, wherein the base  
2 station and the inter-working gateway are interconnected in a local area network.

1           6.       (original) The communications system as recited in claim 1, further comprising:

2           an SDRAM memory;

3           one or more channel elements, each comprising a digital signal processor and associated  
4 flash memory and an application specific integrated circuit to manage baseband processing; and

5           a microprocessor for configuring each channel element, storing user data in the SDRAM  
6 memory, and exchanging user data with the digital signal processor.

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1           7.     (original) The communications system as recited in claim 1, wherein an  
2     interconnection of the inter-working gateway with the base station carries the communications  
3     reformatted with the movable UMTS-based radio-controlled network layer protocols in a first  
4     direction, and the communications reformatted with the movable Internet radio-controlled  
5     network layer protocols in a second direction.

1           8.     (original) The communications system as recited in claim 1, wherein an  
2     interconnection of the inter-working gateway with the radio network controller carries the  
3     communications reformatted with the movable UMTS-based radio-controlled network layer  
4     protocols in a first direction, and the communications reformatted with the movable Internet  
5     radio-controlled network layer protocols in a second direction.

1           9.     (original) The communications system as recited in claim 1, wherein  
2     an interconnection of the inter-working gateway with the base station carries the  
3     communications reformatted with the movable UMTS-based radio-controlled network layer  
4     protocols in a first direction, and the communications reformatted with the movable Internet  
5     radio-controlled network layer protocols in a second direction, and  
6     an interconnection of the inter-working gateway with the radio network controller carries  
7     the communications reformatted with the movable UMTS-based radio-controlled network layer  
8     protocols in a first direction, and the communications formatted with the movable Internet radio-  
9     controlled network layer protocols in a second direction.

1           10.    (original) The communications system as recited in claim 1, further comprising:  
2     a Node-B base station adapted for transmitting and receiving cellular telephone  
3     communications, the Node-B base station being interconnected with the radio network controller  
4     for exchanging wireless cellular telephone communications.

1           11.    (original) The communications system as recited in claim 10, wherein the UMTS  
2     communications system exists at an installed site.

1           12.    (original) The communications system as recited in claim 10, wherein the inter-  
2     working gateway is supplied as pre-installed with the transport protocols.

1           13.    (original) The communications system as recited in claim 10, wherein the inter-  
2     working gateway is adapted to receive and download the radio-controlled network layer  
3     protocols and the transport protocols from the base station.

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1 14. (original) The communications system as recited in claim 10, wherein the base  
2 station and the inter-working gateway are interconnected in a local area network.

1 15. (original) The communications system as recited in claim 10, further comprising:  
2 an SDRAM memory;  
3 one or more channel elements each comprising, a digital signal processor and associated  
4 flash memory and an application specific integrated circuit to manage baseband processing; and  
5 a microprocessor for configuring each channel element, storing user data in the SDRAM  
6 memory, exchanging user data with the digital signal processor, and processing the movable  
7 protocols.

1 16. (original) The communications system as recited in claim 10, wherein an  
2 interconnection of the inter-working gateway with the base station carries the communications  
3 reformatted with the movable UMTS-based radio-controlled network layer protocols in a first  
4 direction, and the communications reformatted with the movable Internet radio-controlled  
5 network layer protocols in a second direction.

1 17. (original) The communications system as recited in claim 10, wherein an  
2 interconnection of the inter-working gateway with the radio network controller carries the  
3 communications reformatted with the movable UMTS-based radio-controlled network layer  
4 protocols in a first direction, and the communications reformatted with the movable Internet  
5 radio-controlled network layer protocols in a second direction.

1 18. (original) The communications system as recited in claim 10, wherein  
2 an interconnection of the inter-working gateway with the base station carries the  
3 communications reformatted with the movable UMTS-based radio-controlled network layer  
4 protocols in a first direction, and the communications reformatted with the movable Internet  
5 radio-controlled network layer protocols in a second direction, and

6 an interconnection of the inter-working gateway with the radio network controller carries  
7 the communications reformatted with the movable UMTS-based radio-controlled network layer  
8 protocols in a first direction, and the communications reformatted with the movable Internet  
9 radio-controlled network layer protocols in a second direction.

1 19. (original) An inter-working gateway for wirelessly transporting Internet protocol-  
2 formatted communications in a Universal Mobile Telecommunications System (UMTS)  
3 communications system, the inter-working gateway comprising:

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4 means for communicating via Internet transport protocols and UMTS-based transport  
5 protocols;

6 means for reformatting communications using movable UMTS-based transport protocols  
7 for transport to a radio network controller; and

8 means for reformatting communications using movable Internet radio-controlled network  
9 layer protocols from the radio network controller to the inter-working gateway.

10 20. (withdrawn) A method for transporting Internet protocol-formatted  
11 communications over a Universal Mobile Telecommunications System (UMTS) wireless  
12 communications system, the method comprising:

13 segmenting Internet-formatted communications into Internet framing protocol-protocol  
14 data units (FP-PDUs);

15 multiplexing the FP-PDUs over separate label switched paths via multiple protocol label  
16 switching (MPLS); and

17 exchanging the multiplexed FP-PDUs as formatted multiplexed MPLS data segments  
18 between a base station and a radio network controller.

19 21. (withdrawn) The method as recited in claim 20, further comprising:  
20 installing radio-controlled network protocols in an inter-working gateway interconnected  
21 between the base station and the radio network controller.

1 22. (withdrawn) The method as recited in claim 20, further comprising:  
2 segmenting the Internet-formatted communications into FP-PDUs of 350 octets  
3 maximum length.

1 23. (withdrawn) The method as recited in claim 20, further comprising:  
2 formatting the FP-PDUs with UMTS radio-controlled network layer protocols for  
3 transport in the UMTS wireless communications system; and  
4 formatting the FP-PDUs with Internet radio-controlled network layer protocols for  
5 transmission as wireless Internet communications.

24. (withdrawn) The method as recited in claim 21, further comprising:  
transporting the FP-PDUs formatted with UMTS radio-controlled network layer  
protocols from the base station in a first direction; and

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transporting the FP-PDUs formatted with Internet radio-controlled network layer protocols in a second direction.

25. (original) A method for transporting Internet protocol-formatted communications over a Universal Mobile Telecommunications System (UMTS) wireless communications system, the UMTS communication system including a base station and a radio network controller, the communication system comprising:

reformatting communications using movable UMTS-based radio-controlled network layer protocols for transport between the base station and the radio network controller; and

reformatting communications using movable Internet radio-controlled network layer protocols for transport between the base station and the radio network controller.

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